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EC proposes imprisonment for patent violations

The European Commission (EC) has proposed legislation that would make violating patents a criminal offence, subject to jail terms. Both digital rights groups and large technology businesses such as Microsoft and Nokia have united in opposition.

If agreed, the new law could send top executives to EU jails for approving software that, even unintentionally, violates minor and abstract software patents. More seriously, it could fatally destroy any remaining culture of innovation and risk-taking left in the software industry.

The EC is preparing a rule that would make the violation of a patent a criminal offence across all 25 EU member states. European member countries currently protect patents under state-level legislation and can impose fines for infringement.

"We believe that we need to protect innovators, therefore we want to send a strong signal to those people infringing intellectual property that they face criminal sanctions," said an EC spokesperson.

However, extending such legislation into the arena of patent law is highly contentious. The entire system of registering patents, especially in such

areas as computer software, is widely regarded as dysfunctional at best. Companies and individuals overload patent offices around the world with filings that are minor and almost impossible to prove. In this context, the new law threatens even large companies, which may find employees facing jail terms for selling software that inadvertently violates some arcane patent relating to, for example, a sequence of mouse clicks.

Groups such as the Electronic Frontier Foundation (EFF) have long fought against the protection of what they regard as frivolous software patents. Companies that previously campaigned long and hard for patent legislation now face the prospect of their own executives doing time for patent violation and have reversed their positions.

Tim Frain, director of intellectual property at Nokia, condemned the legislation as "ludicrous." He told the *New York Times* that, "with patents, it's never black and white. Sometimes third-party patents are so weak that I advise managers to go ahead because, after making a risk analysis, we feel we can safely challenge the existing patent. But with this law, even if I'm certain the existing patent is no good, the manager would be criminally liable."



Virtually every software and hardware company expects patent litigation as part of the cost of doing business, and disputes are usually settled out of court. If the law becomes more directly involved, doing business could become tricky. "The law could trigger abusive criminal litigation, which would have a chilling effect on innovation," said a spokesman for the Business Software Alliance, a trade body generally known for its tenacious lobbying for the intellectual property rights of its members.

Yahoo! joins internet telephony market

Yahoo! is entering the internet telephony market by extending its Messenger with Voice service so users can make calls to and accept calls from telephones.

The new service, which is still in beta at the time of writing, offers calls from a PC to phone at rates that promise to undercut Skype. So far Yahoo! offers calls to the US for one cent per minute and lower prices to more than 30 other countries. Skype charges 1.2p per minute for calls to most major countries. PC-to-PC calls are free for both services.

"These prices, in most cases, offer dramatic reductions over other competitors out there," said

Jeff Bonforte, Yahoo!'s senior director of voice product management.

Yahoo!'s entry into the VoIP market follows Google's tests of its Click-To-Call service, in which clicking on a phone icon beside a search result enables a PC user to place a free call to an advertiser. Google is expected to become a full VoIP telephony provider along with Yahoo!. AOL has also made tentative steps into the PC-to-phone market.

Meanwhile, Microsoft is rolling out its own VoIP service as part of its Windows Live online service. It has started in the US, and the UK and other large

European countries will follow shortly. BT has also said it is gearing up to improve Communicator, its own VoIP service, which has so far attracted just 50,000 subscribers. The telecoms giant has already cut prices – to undercut Skype, it said.

These developments leave eBay, which paid around \$2.6 billion (around £1.5bn) for Skype, facing competition from the world's three most powerful internet companies over what is expected to become 2006's hot new tech market.

For full details of Yahoo!'s pricing, visit <http://voice.yahoo.com>.



Wikipedia's JFK claim forces policy change

An online encyclopedia has linked a professor's name with the deaths of John Kennedy and his brother Bobby. An entry on Wikipedia, the most visited online encyclopedia, claimed that John Seigenthaler, a distinguished 78-year-old university professor, was involved in the two assassinations. The professor found the scurrilous biographical entry posted about him on the non-profit site, which invites contributions from anyone.

While Seigenthaler had been an assistant to Bobby Kennedy, he had never been party to any murder plots. Another part of his erroneous biography read: "John Seigenthaler moved to the Soviet Union in 1971, and returned to the United States in 1984. He started one of the country's largest public relations firms shortly thereafter." This was all news to Seigenthaler.

"At age 78, I thought I was beyond surprise or hurt at anything negative said about me," Seigenthaler wrote in an article in *USA Today*. "I was wrong. One sentence in the biography was true. I was Robert Kennedy's administrative assistant in the early 1960s. I also was his pallbearer. It was mind-boggling when my son, John Seigenthaler, journalist with NBC News, phoned later to say he found the same scurrilous text on Reference.com and Answers.com. For four months, Wikipedia depicted me as a suspected assassin."

Seigenthaler called Wikipedia founder Jimmy Wales, who had the entry removed but told him he was unable to track down the poster of the article. Wikipedia allows contributors to post anonymously, and typically more than 1,500 new entries are posted every day.

A week after Seigenthaler's article appeared with an appeal to track down his rogue biographer, 38-year-old Brian Chase from Nashville admitted that he had posted the entry on Wikipedia. In a letter to Seigenthaler, he explained that his actions were a joke intended to shock a colleague who knew Seigenthaler as a Nashville denizen.

Seigenthaler decided not to sue for libel, but Chase subsequently resigned from his job under the heat of the media spotlight. Meanwhile, Wales said that Wikipedia had decided to make a few changes. "We've decided that we want to slow down the creation of new pages, so ... we're preventing unregistered users from creating new pages, because so often those have to be deleted," he said.

● See *News Analysis*, page 277.

China's IT industry challenges US

China became the world's biggest exporter of technology goods in 2004, knocking the US off the top for the first time ever, according to a recent report from the Organisation for Economic Cooperation and Development (OECD).

In 2004 China exported \$180 billion (around £104bn) worth of goods such as PCs, mobile phones and digital cameras, an increase of 46 per cent from 2003 figures. The US exported \$149 billion (around £186bn), up by two per cent. While these figures don't make China the leading tech economy just yet, it is the latest sign that new technologies and standards are increasingly being set in China rather than in the US.

This will have enormous implications for the PC world. For example, the dominant position of US technologies such as Windows could be undermined by China's preference for Linux. China recorded an enormous trade surplus in PCs and laptops of around \$45.4 billion (around £26bn) in 2004, the strongest sign yet that the country has already moved up from

supplying most of the components for well-known US brands such as Dell, HP and Apple. Already these companies outsource most of their manufacturing to subcontractors on the Chinese mainland.

The OECD report's author, Sacha Wunsch-Vincent, said the figures underline how quickly China has moved from being a producer of relatively low-tech items such as TVs, stereo systems and cheap electronics to cutting-edge hi-tech goods. It recently announced that it had built the world's second most powerful supercomputer, and Tsinghua University has developed a new processor that matches the Intel Pentium II.

Last May, China's growing presence in the PC market was signalled in dramatic fashion, when its leading PC vendor, Lenovo, bought IBM's PC business for \$1.75 billion (around £1bn). IBM's presence in the market may have been fading over the past decade, but it was the IBM PC that established the x86 standard and inadvertently propelled Microsoft into the dominant

position it enjoys today. In future, the kind of backroom deal-making that created today's US tech giants could be more likely to take place in Shanghai than Silicon Valley.

China has recently started exporting more high-tech goods than it imports. Overall, China's trade surplus in tech products almost tripled during 2004 to \$31 billion (around £18bn), up from \$12 billion (around £7bn) in 2003. China recorded its first surplus in tech goods as recently as 2002. It still relies on imports of microchips and circuit board components from the US, and here it registered a deficit of almost \$62 billion (around £36bn).

However, the US and EU's strength in these high-end products is weakening. "To manufacture laptops and advanced mobile phones, China previously relied on electronic components, such as computer chips, imported from the EU and United States," said the report. However it revealed that China is increasingly buying these components from countries such as Korea, Taiwan and Japan.

NEWS

BRIEF

■ GAMES COMPANY HACKED

Hackers have attacked a role-playing games company and put stolen customer information up for sale. White Wolf Publishing published a letter on its site saying that it was the "target of an attack by international hackers", and that it was in contact with the FBI.

Users of the service were advised that their passwords might be compromised and that, if they use the same password with other services, they should change them as soon as possible. Although the passwords were encrypted, given time they could be decoded. No credit card details are believed to have been stolen.

■ FORENSICS COMPANY HACKED

Unlike White Wolf, Guidance Software stored credit card details on its database, and didn't bother with encryption either. The security company had some explaining to do when it emerged that it too had been hacked, with the attackers making off with thousands of customers' details.

These customers, who were generally law enforcement officials, received letters from the company warning of the theft. The *Washington Post* reported that one forensics investigator received his letter at the same time as his credit card bill, which already listed an unauthorised \$20,000 (around £12,000) transaction.

■ CHURCH SITE HACKED

In the run-up to Christmas, hackers targeted the Aid to the Church in Need (UK) website and stole personal details, including credit card numbers, belonging to nearly 3,000 benefactors of the charity. The attackers then contacted donors and attempted to solicit further funds.

Following the security breach the charity contacted the card owners and turned off the site. As *Shopper* went to press the site was still displaying a basic page saying: "We apologise for the fact that our website is unavailable at this time; we hope to be able to make our site available again shortly."



NEWS

BRIEF

■ VIRUS CATCHES CHILD PORN USER

A German child porn offender has handed himself in to police after receiving an email sent by the Sober worm, a computer virus that sends a message claiming to have been tracking the online activities of the recipient.

The 20-year-old man is now subject to criminal procedures after police searched his PC and found images of child porn and evidence that they had been sent via email. The German Paderborn police said the effect of the Sober worm has additionally "helped police with the clearing up of several sexual crimes".

■ COUNTERFEITERS CLAMPDOWN

Microsoft is clamping down on counterfeiters and illegal sales of its products, filing 10 suits across the US. Seven of the suits centre on the abuse of the Microsoft Action Pack Subscriptions (MAPS) programme, which gives retailers access to Microsoft's products in order to test them internally. However, it transpires that these products were being sold to consumers through online auction sites such as eBay.

Microsoft claims that, as well as knowingly breaking the terms of the agreement under which the products were obtained, the practice puts unfair competition on its partners that are selling Microsoft goods through approved channels.

■ BAND REVOLTS OVER SONY PROTECTION

US band My Morning Jacket has responded to fans' complaints about copy-protected Sony BMG CDs by sending them DRM-free copies of its album.

The group began burning unrestricted CDs after fans found that they could not transfer the album Z to their iPods. The band's manager Mike Martinovich told *Rolling Stone* that Sony BMG should drop DRM on CDs entirely. "I just don't think that this is the answer to the problem that they think exists," he said.

Sony has already stated that it is reviewing its policy, having previously committed to adding copy controls to all its CDs.

Sun makes chip design open source

Not content with making its Solaris operating system open source, Sun has announced that it will publish the design specifications of its new UltraSparc T1 chip as "hardware source code".

"A silicon chip these days is just the compiled version of a software design," said Simon Phipps, Sun's chief open source officer. "A chip like the UltraSparc T1 is actually a huge Verilog program compiled to atoms instead of assembly language."

Verilog is a hardware description language that's used to model electronic systems. It supports the design, testing and implementation of circuits at various levels of abstraction. Publishing the Verilog code for a chip design is analogous to making the source code of an application freely available, according to Sun.

Sun hopes to encourage third-party chip companies to produce new versions of Sparc for a wide range of niche markets that Sun doesn't address, and that the overall Sparc design will benefit from the work done by lots of chip experts.

"The Verilog source code, tools and more behind the UltraSparc T1 will be released under an OSI-approved open-source licence next year – OpenSparc – and a community will hopefully be



forming to use that design point for any purpose that's interesting. I think that's revolutionary," said Phipps.

This may be revolutionary for hardware manufacturers, but some software companies have worked this way for years. Novell sponsored the openSuSE.org project, which encourages a community to develop its SuSE Linux distribution. The company benefits by cherry-picking

useful and interesting developments made by third parties.

This is exactly what Sun hopes to achieve. "We're throwing open the doors of innovation for everyone to participate, fostering new growth and economic opportunity for Sun and the internet of the future," said Sun CEO Scott McNealy.

Much of the third-party hardware development is likely to be theoretical, but other chip companies will no doubt pay close attention to the design. "While no-one expects [to see] garage hackers doing their own chip fabs, there's no question that hardware designers can learn from each other's work as readily as software designers, and that design elements taken from one chip could more quickly advance the development of others," said Tim O'Reilly, CEO of O'Reilly Media.

However, some analysts suggest this is a desperate move as Sun has fallen from first to fourth in the server market, and has been forced to abandon its Sparc-only strategy and ship x86-based hardware to fend off competition in the lower end of the server market.

Intel scoffs at MIT's \$100 laptop for poor

Intel chairman Craig Barrett has dismissed the \$100 (around £57) charity laptop being developed by the Massachusetts Institute of Technology (MIT) as a "\$100 gadget" that will do little to bridge the digital divide in developing countries.

The One Laptop Per Child project, spearheaded by MIT Media Lab chairman Nicholas Negroponte, attracted global attention when a prototype was shown in November at a UN summit in Tunisia (see *Newsfile, Shopper* February 2006).

MIT hopes to sell more than 150 million laptops to developing countries such as Brazil, Egypt, Nigeria and Thailand for use in educational projects. The project

was warmly endorsed by international figures, including UN general secretary Kofi Annan. MIT received many plaudits for its efforts to create a platform that is cheap, robust, able to use wireless networks and can be powered by a hand crank so it will work in areas where electricity supplies are unreliable.

None of this impressed Barrett. "Mr Negroponte has called it a \$100 laptop. I think a more realistic title should be 'the \$100 gadget'. The problem is that gadgets have not been successful," he said.

"It turns out that what people are looking for is something that has the full functionality of a PC, reprogrammable to run all the

applications of a grown-up PC, not dependent on servers in the sky to deliver content and capability to them, not dependent on hand cranks for power," said Barrett.

Barrett's antagonistic stance may have been triggered by comments from Seymour Papert, an MIT professor working on the laptop, who said that PC companies "have followed a policy of stuffing more and more into [a laptop PC] which most people don't really need and kept the price up. I think it's quite amazing that they managed to convince the world to accept that, but they did," he said. The fact that the MIT laptop uses a 500MHz AMD processor probably didn't help either.



Google buys stake in AOL

Google has acquired a five per cent stake in AOL. Industry observers believe that the move is designed to protect Google's position as AOL's underlying search engine. The deal may also help AOL to reinvent itself as its traditional dial-up internet service provider business declines.

AOL's parent company, Time Warner, was known to be in detailed negotiations with Microsoft, which was keen to buy a stake in AOL and replace Google with its own MSN search engine. An industry insider who was party to Time Warner's talks with Microsoft told the *Washington Post* that the Windows giant was "probably unhappy and hurt" over the outcome, which cements Google's position as the leading search engine. Google accounts for 36 per cent of the market, followed by Yahoo!, which has 30 per cent, followed in a far distant third place by MSN, with just 15 per cent.

In November, Google warned its investors that its business would be "adversely affected" if its relationship with AOL was terminated. Supplying AOL with search and targeted advertising was worth more than \$400 million (around £230m) in advertising revenue to Google during 2005, around 11 per cent of its total sales for the year. The search giant decided that it was worth spending \$1 billion (around £574m) on a stake in AOL to protect an important revenue stream.

Google's investment in AOL gives the ISP a notional value of \$20 billion (around £11bn), should Time Warner decide to rid itself of its troubled online business. Time Warner has debts of around \$13 billion (around £7bn) as a result of its disastrous 2001 acquisition of AOL for \$106 billion (around £61bn), a record amount at the time.

However, the new five-year deal with Google could help resurrect AOL's flagging business thanks to the

improved terms it has negotiated. Google has agreed to give AOL millions of dollars of free advertising on its search engine to help promote AOL websites such as MapQuest. AOL has secured an exclusive right to sell online banner ads for Google, and it will keep about 20 per cent of the proceeds from these sales.

AOL has also won the right to sell Google-generated text-based ads, which will appear on AOL's network of websites. Until now Google had reserved this right for itself. Overall, the agreement is important for AOL to reinvent itself as an advertising-driven web portal open to anyone, and away from its declining proprietary ISP business.

Google may also benefit from closer ties with AOL, whose instant messaging service, AIM, has around 43 million users worldwide. Google is expected to make the service interactive with Google Talk and so create a large user base for its nascent VoIP service.

First bundles from Adobe since Macromedia takeover

Adobe has completed its \$3.4 billion (around £2bn) takeover of former rival Macromedia and has released two product bundles containing programs from both companies.

Adobe has released two discounted product bundles that combine Adobe Creative Suite 2 with Macromedia products. The Adobe Design Bundle adds Flash Professional 8 and costs £1,380 excluding VAT. The Adobe Web Bundle adds Macromedia Studio 8, which includes Macromedia Dreamweaver 8, Fireworks 8 and "key maintenance and productivity tools", including Macromedia Contribute 3 and Macromedia FlashPaper2, as well as Flash Professional 8. This costs £1,655 excluding VAT.

However, Adobe acknowledges that "there is no additional integration or change to the software included in the Adobe Design Bundle or Adobe Web Bundle at this time". Adobe's Web Bundle includes two web page

creation packages: its original GoLive product and the newly acquired Dreamweaver. Macromedia customers will not be overjoyed by the fact that, while existing users of Creative Suite are offered a cheap upgrade path, there is no equivalent for users of Macromedia products such as Dreamweaver.

Adobe was unable to finalise the deal, which was first announced in April 2005, until 3rd December because it had to convince regulators that it would not create a monopoly in the graphics industry. The two companies have been regarded as competitors in the past, with products such as Macromedia's Freehand and Dreamweaver the main rivals to Adobe's Illustrator and GoLive.

In the past few years the companies' markets have diverged, however. Adobe has focused on the design and print market with Photoshop and InDesign, leaving Macromedia to dominate the web content creation and

animated graphics markets with its Dreamweaver and Flash products.

For Adobe, the greatest prize is Flash, Macromedia's nearly universal format for animated graphics. Together with Adobe's own PDF, the combined company controls two of the three most important cross-platform file formats. The other format is HTML and, with Dreamweaver and GoLive, Adobe now owns the two most popular applications professionals use to create HTML content.

Adobe's move is also defensive as the company braces for an onslaught from Microsoft, which aims to dominate industry file formats and is preparing its own technologies to compete with PDF and Flash.

Adobe is on record as stating that it plans a "strategic initiative to advance a powerful software platform, based on PDF and Macromedia Flash technologies, that scales from mobile devices to high-end servers".

NEWS

BRIEF

■ CUSTOMISE GOOGLE

Google has launched a new system that allows users to customise its home page. The update makes it easier to build a customised home page, adding links to web feeds including stock tickers, news sites and Gmail.

The personalisation features are similar to the Gadgets service recently launched by Microsoft for its Live.com service. Users can choose from preset feeds or create their own, although it lacks the drag-and-drop usability of the Microsoft version. See www.google.com/ig.

■ MS AND MTV GET THE URGE

MTV is joining forces with Microsoft to launch the Urge music downloads service. The software giant will supply the technology for the service, which will sell copy-protected WMA files from a start-up catalogue of more than two million tracks.

MTV would not say how much it will charge, but revealed that it will offer a download and a subscription service. Only Windows Media-compatible portable music players will be supported, which excludes iPods.

■ GOOGLE MUSIC SEARCH

Google has introduced a music search function to its site. Recognising the popularity of music-based searches, the company has added a specialised search option at www.google.com/musicsearch. Search results include categories such as Artist, Songs and Albums.

Clicking on a link provides basic information from Google's archive. There are also links to music sales sites, such as iTunes.

■ IPOD 'DOMINANT FOR YEARS'

Apple's dominance of the music player market is likely to continue for years, according to Piper Jaffray analyst Gene Munster. In a note to investors, he said that the iPod's huge market share gives Apple cost savings that its rivals cannot match. The 30GB iPod, for example, is nine per cent cheaper per gigabyte than Creative's new Zen Vision:M.



NEWS

BRIEF

■ SPAM IN DECLINE

The US Federal Trade Commission says that the controversial CAN-SPAM Act is working. In a report on the legislation, the Commission says there has been a steady decline in the amount of junk email filling inboxes.

The FTC quoted a report from email filtering firm MX Logic, which claimed that during the first eight months of 2005 spam accounted for 67 per cent of email passing through its system. This is a nine per cent decrease from the same period a year earlier. AOL says that the volume of spam email has declined even further and that its members received 75 per cent less spam in 2004 than in 2003.

■ WIFI FOR UK CITIES

The UK will soon have blanket wireless networking coverage in all its cities, according to networking company The Cloud. It also plans to provide wireless internet access in other areas dense population. WiFi-equipped lampposts and street signs will give ISPs the enhanced coverage. Initially the hardware will be installed in three London boroughs, Birmingham, Cambridge, Edinburgh, Leeds, Liverpool, Manchester, Nottingham and Oxford.

ISPs will collect the cash from subscribers and split it with local councils and The Cloud. The first phase, which will provide coverage in the above areas, should be complete by March.

■ BBC VIDEO FOOTAGE

The BBC has released a selection of news clips that the public can download and edit for use in non-commercial projects. The 80 or so clips include the fall of the Berlin Wall and behind-the-scenes footage of the 1966 England World Cup team. They have been made available under the Creative Archive Licence, so are free to use for personal or educational purposes.

The Creative Archive (<http://creativearchive.bbc.co.uk>) also contains links to items from Channel 4, the Open University and the BFI. You can go straight to the latest BBC news clips at www.bbc.co.uk/calc/news.

Creative in iPod patent enforcement

Creative Labs is threatening to sue Apple for violating a US patent it was awarded in August that relates to music players. The patent describes a user interface that organises and navigates music tracks stored hierarchically, enabling them to be accessed through three or more screens. In other words, it describes the process by which a user might successively drill down through an artist, an album and then a track menu to select a track, a process with which iPod users will be familiar.

Singapore-based Creative Labs' CEO Sim Wong Hoo said his company will "pursue [the patent] aggressively". While he didn't name specific companies targeted for litigation, Apple is far and away the market leader and the biggest threat to Creative Labs, which lost \$9.3 million (around 5.3m) in its last quarter (ignoring a one-off gain from investments). Creative said it expected to sell around eight million music players during 2005,

compared with an estimated 22 to 25 million iPod sales for Apple.

"We will pursue all manufacturers that use the same navigation system," said Hoo. "This is something we will pursue aggressively. People have to respect intellectual property." Creative said that it applied for its patent, which it calls the Zen Patent after the brand of its music player, in January 2001. This was nine months before Apple introduced its first iPod in October 2001.

"By January of 2001, we announced that we had already sold 100,000 Nomad Jukeboxes. The Apple iPod was only announced in October 2001, 13 months after we had been shipping the Nomad Jukebox based upon the user interface covered by our Zen Patent," said Hoo.

Apple's own application for a patent on the iPod's user interface was turned down in August, which may account for Creative Labs' aggressive stance. If the company



sues Apple, a lengthy and potentially expensive lawsuit could ensue. US courts do not always rule in favour of enforcing patents, which could help Apple provided it can ride out a long case.

Hoo made his threats during the December 2005 launch of Creative Labs' new range of music players, the Zen Vision:M line. Ironically, the new music players are notable for their similarity in styling to Apple's latest line of iPods.

UK honesty boosts economy

The UK's software piracy rate is so low that the economy has benefited to the tune of \$8 billion (around £4.5bn) and 11,000 new jobs. However, there is still significant room for improvement. Reducing the rate from 27 to 17 per cent "would add nearly \$19 billion to the economy, create nearly 34,000 jobs, increase local industry revenues by \$16.8 billion and generate an additional \$4.9 billion in tax revenues," according to a report commissioned by the Business Software Alliance (BSA) and conducted by the market research firm IDC.

According to the report, the UK has a "comparatively low software piracy" rate. The global average is 35 per cent. It states that "by further reducing its software piracy rate, the United Kingdom could grow its IT sector by 37 per cent instead of 30 per cent between 2004 and 2009 and add 145,000 more high-tech jobs by 2009". The report claimed that the UK's IT

sector, which is worth nearly \$70 billion a year, "could grow to \$95 billion by 2009" with just a 10 per cent decrease in piracy.

In an effort to illustrate the real damage software piracy does to the global economy, the BSA-IDC study examined 70 countries. According to the study, cutting the global piracy rate of 35 per cent by 10 per cent over four years could generate 2.4 million new jobs, \$400 billion in economic growth and \$67 billion in

tax revenues worldwide. "Every one percentage point drop in software piracy could yield \$40 billion in economic benefits," it claimed.

"When countries take steps to reduce software piracy, just about everyone stands to benefit," said Robert Holleyman, BSA president and CEO. "Workers have new jobs, consumers have more choices, entrepreneurs are free to market their creativity and governments benefit from increased tax revenues."

Virus alert



A new type of vulnerability has been discovered in Microsoft Windows and is already being exploited by viruses. The security hole lies in the Windows Metafile (WMF) file format, which is generally used for images that

contain both vector and bitmap data. Just visiting a website that displays an infected image file can infect your Windows system. No patch is currently available from Microsoft so an anti-virus update is recommended.



Say goodbye to scratched CDs

A US company claims it has produced CDs that are virtually impervious to the scratches and everyday wear and tear that can render priceless backups and favourite music collections useless.

Denver-based Scratch-Less Disc Industries (SLDI) says its new discs are protected by a polymer, designed by US conglomerate General Electric, that is 100 times more scratch resistant than the coating typically used on optical media. According to the company's CEO, Todd Kuchman, the polymer is as resistant to scratches as glass.

The new CDs have a ring of 20 small "patented bumps called Aero-Bumps that elevate the disc to avoid contact, thereby eliminating damage". The discs also have a slanted and raised edge, the Easy-Up-Edge, that enables the user to pick up the disc easily from a flat surface. "The Scratch-Less Disc can be safely slid across or lifted directly from a surface, providing unparalleled damage prevention," said Kuchman.

"As industry trends compress more digital content on to a 12cm disc, such as DVDs compared with CDs, the environmental damage, such



as scratches and scuffs, that accumulates on discs causes exponentially more malfunctions during use, frustrating the end-users and pushing them to search for newer, more reliable alternatives.

"These are the safest optical discs available today, and a significant product that provides a much higher level of long-term security for the storage of photos,

music and soon movies on our DVDs," he continued.

SLDI said it was focusing on recordable optical media, as there had been little interest from the music industry in making CDs more robust. People repurchasing damaged albums accounted for almost a quarter of sales in 2001. The need to back up vulnerable CDs has been cited as one of the main arguments against copy-protecting music CDs.

The Scratch-Less Disc is currently available in CD-R format, and CD-RW will follow soon. DVD formats, including DVD+R, DVD-R, DVD+RW and DVD-RW, will appear during the first quarter of 2006. So far only US retail outlets have the discs, but UK consumers can get the latest information on buying them over the internet from www.scratchlessdisc.com. The company says its discs sell for around \$1 (around 57p) each, a "slight premium" over the price of standard optical media. It claims that the CDs are compatible with over 99 per cent of CD players.

Intel uses MoD technology

Secret semiconductor research from the Ministry of Defence could help Intel maintain Moore's Law, which predicts that CPU processing power will double every 18 months or so.

As semiconductor companies have tried to squeeze extra performance out of silicon-based processors, they have run into problems including high power consumption and excessive heat emission. But Intel has announced a prototype of a new transistor based on indium antimonide that, according to the company, runs significantly faster and cooler than similar components that use traditional technology.

Intel's work was based on pioneering research from QinetiQ, the commercial spin-off of a UK government research agency. "We first developed indium antimonide transistor technology as part of a

UK Ministry of Defence project," said Tim Phillips, business manager of the Fast Transistors group at QinetiQ. "Although this research is still in the initial phase, it still shows huge promise for advanced applications."

The partners have built 'quantum well' transistors using indium antimonide (InSb), which enables devices to operate at very low voltages while still switching rapidly and consuming little power. The two companies demonstrated, for the first time, prototype enhancement transistors with a gate length of just 85nm, which are able to operate at a voltage of about 0.5 volts. This is roughly half the voltage transistors use in current chips.

"The research results obtained from the quantum well transistors research showed a ten times lower power consumption for the same performance, or conversely a three

times improvement in transistor performance for the same power consumption, as compared to today's traditional transistors," said a QinetiQ spokesperson.

Just as chip manufacturers come up against the speed limits of their current technology, this research could enable them to regain their earlier momentum. "The results of this research reinforce our confidence in being able to continue to follow Moore's Law beyond 2015," said Ken David, director of components research for Intel's Technology and Manufacturing Group.

Indium antimonide is close to silicon in the periodic table and is similar in many ways, which means it should be relatively easy to adapt existing chip designs and ramp up production by the middle of the next decade.

NEWS

BRIEF

■ EU PASSES DATA RETENTION DIRECTIVE

The European Parliament has finally approved the Data Retention directive, which states that telcos and ISPs should store all electronic communications, including location data on calls, SMS and internet-use calls, for 24 months. The MEPs also voted to include the retention of unsuccessful calls.

The hard-fought directive is the result of a compromise between the two biggest blocs in the Parliament, the centre-right European People's Party and the centre-left Party of European Socialists (PES). It ignored many of the recommendations of the Parliament's own civil liberties committee.

■ KAZAKHSTAN SHUTS DOWN BORAT

Sacha Baron Cohen's portrayal of fictional Kazakh Borat has finally proved too much for Kazakhstan's authorities. Cohen's www.borat.kz website has been shut down by the authority that governs the country's .kz domain.

"We've done this so he can't badmouth Kazakhstan under the .kz domain name," Nurlan Isin, president of the Association of Kazakh IT Companies told Reuters. "He can go and do whatever he wants at other domains." He added that the site had also broken association rules as it was registered using false names.

■ HARPERCOLLINS TO DIGITISE CATALOGUE

Publisher HarperCollins has announced that it is to digitise around 20,000 books in an effort to counter the proliferation of copyright violation on the web.

With Google planning to make millions of books freely available, and other search companies expected to follow suit, HarperCollins believes that publishers need to take the initiative and digitise their catalogues themselves. This will allow the likes of Google, Yahoo! and Amazon to index the content and help web users find the complete work, according to Brian Murray, HarperCollins's group president.